UNIVERSITY OF LONDON

POSTGRADUATE MEDICAL SCHOOL
OF LONDON

Telegrams
POSGRADMED CHISK LONDON
Telephone
SHEpherds Bush 1260 (4 lines)

DUCANE ROAD
LONDON, W.12

Dept.of Bacteriology. 20 February,1953.

My dear Lederberg,

I enclose two copies of the only relevant paper I have on antigen XII_2 variation. It is not really very informative. I assume that the mechanism of the variation is similar to that of flagellar diphasic variation but occurs at a much higher rate in most strains. I tried looking for a phage specific for XII_2 about two years ago but I restricted my search to Salm.enteritidis and did not succeed. There is one point in the paper which is incorrect. I state that the Indian strains do not undergo variation. More extended observation showed that they do, They appeared to be stable for some time after isolation but then seemed to indulge in bursts of variation after which they settled down again.

As regards K-12,let us abandon discussion until we meet at CSH. I find it both difficult and very time consuming to try to express myself in letters. I will send you a copy of my paper when it is ready in 6-8 weeks time. My only reason in suggesting that I might like to quote from your unpublished work on the transduction of genetic characters without transfer of lysogenicity, was to back up my argument that the finding of F- prototrophs in the 58/F- X W/F+ and Hfr X W/F- crosses does not exclude the F+

agent as a genetic carrier. Since,however, you will yourself be reviewing such points as these in your paper,that is sufficient and I am peffectly happy to restrict myself to your published work.

You will shortly be receiving a short genetic paper by Jim Watson and myself producing some evidence in favour of a minimum of three chromosomes in K-12. There are certain discrepancies but I think it is plausible. I do'nt know when it will be appearing in print. I have progressed quite a lot in genetics since the autumn(anyway so far as understanding the simpler comcepts are concerned!) but the ideas behind this paper were entirely Watson's.

With best wishes,

Bill Hayes